DETAILED ACTION

1.   This office action is in response to the communication filed on 02/27/2004.

2.   Claims 1-34 are pending and presented for examination.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4.   Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims recite abbreviations such as APN. Such terms have to be spelled out in the claim. Correction is required.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6.   Claims 1, 2, 12, 13, 15, 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Jorma et al. (EP 0,781,064 A2 , hereafter Jorma, cited in IDS).

7.   For claim 1, Jorma discloses an apparatus for a radio communication system having a mobile node selectably operable at least to communicate packet data with a

network part, the network part comprised of a plurality of network portions, a first

network portion of the plurality forming a home network associated with the mobile

node, said apparatus for at least facilitating selection of with which network portion of

the plurality of network portions that the mobile node communicates, said apparatus

comprising:

a storage element embodied at the mobile node, said storage element for storing

values defining a database (fig. 24, mobile device memory's database with service list),

the database forming a listing identifying at least selected ones of the plurality of

network portions together with an indication associated therewith of network-portion

capability to provide packet data connectivity with the mobile node to communicate

packet data therewith (col. 6 lines 16-31, list of packet data networks available at the

mobile device); and

a selector adapted to access the database defined at said storage element, said

selector for selecting through which of the network portions of the plurality of network

portions to communicate the packet data, selection made by said selector at least in

part dependent upon the listing formed of the database defined at said storage element

(col. 5 lines 15-20, select a packet data supported service from a list).

8.   For claim 2, Jorma further discloses a detector embodied at the mobile node,

said detector for detecting messages delivered to the mobile node that are of values

identifying the network-portion capabilities of associated network portions of the

selected ones of the network portions (col. 4 lines 46-51, search and update a network list with new networks having desired associated capabilities).

9.   For claim 12, Jorma further discloses the mobile node is further selectably for communicating voice data and wherein the listing formed of the database defined at said storage element further identifies the at least selected ones of the plurality of network portions together with an indication associated therewith of network-portion capability to provide voice data connectivity with the mobile node to communicate voice data therewith (fig. 12A, cellular network for voice).

10.   For claim 13, Jorma further discloses said selector is further selectably for selecting through which of the network portions of the plurality of network portions to communicate the voice data (fig. 12A).

11.   For claim 15, Jorma discloses a method of communicating in a radio communication system having a mobile node selectably operable at least to communicate packet data with a network part comprised of a plurality of network portions, a first network portion of the plurality forming a home network associated with the mobile node, said method for at least facilitating selection of with which network portion of the plurality of network portions that the mobile node communicates, said method comprising:

storing values defining a database, the database forming a listing identifying at least selected ones of the plurality of network portions together with an indication associated therewith of network-portion capability to provide packet data connectivity with the mobile node to communicate packet data therewith (fig. 24, mobile device memory's database with service list, col. 6 lines 16-31, list of packet data networks available at the mobile device); and

selecting through which of the network portions of the plurality of network portions to communicate the packet data, selection made during said operation of selecting at least in part dependent upon the listing formed of the database defined during said operation of storing (col. 5 lines 15-20, select a packet data supported service from a list).

12.   For claim 27, Jorma discloses network node for a radio communication network, said network node comprising:

an information storer configured to store information (fig. 24, mobile device memory's database with service list), the information stored at said information storer comprising a network identity and an indication of service available in a network identified by the network identity (col. 6 lines 16-31, list of packet data networks available at the mobile device).

13.   For claim 28, Jorma discloses a method for providing a mobile node with network information, said method comprising the operations of:

receiving a first message from the mobile node (col. 4 lines 46-51, search

command from user); sending a second message to the mobile node, the second

message including a network identity and an indication of services available in a

network identified by the network identity (col. 4 lines 46-51, returns updated list of

located networks with services to user)

14.   For claim 29, Jorma further discloses the operation, prior to said operation of

receiving, of sending, from the mobile node, the first message (col. 4 lines 46-51,

search command from user).

15.   For claim 30, Jorma further discloses the operation, subsequent to said operation

of sending the second message, of receiving the second message at the mobile node

(col. 4 lines 46-51, returns updated list of located networks with services to user)

Claim Rejections - 35 USC § 103

16.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

17.   Claims 3-11, 14, 16-26, 31-34, are rejected under 35 U.S.C. 103(a) as being

unpatentable over Jorma, in view of Bridges et al. (US 2003/0186695, hereafter

Bridges).

18.   For claim 3, Jorma discloses the invention as in claim 2. Jorma does not disclose

the network part broadcasts the messages delivered to the mobile node, and wherein

said detector selectably detects broadcasts of the messages by the network part.

However, Bridges discloses the same (fig. 4, fig. 2A, [0046], [0074], central

OTAF database containing PSL/IRDB information on list of services and providing

downloading to mobile devices, [0085], [0125], broadcasting list)

Therefore, it would have been obvious for one skilled in the art at the time of the

invention to combine the teachings of Jorma and Bridges to implement service list

distribution from a central database.

19.   For claim 4, Jorma-Bridges discloses the invention as in claim 3. Jorma-Bridges

further discloses at least selected ones of the network portions of the network part

broadcast messages of the values identifying the network portion capabilities, a

selected message broadcast by a selected network part containing values identifying

the network portion capabilities of the selected network portion from which the message

is broadcast (Bridges, [0085], broadcast a message identifying which operator is

providing services).

20.   For claim 5, Jorma-Bridges discloses the invention as in claim 4. Jorma-Bridges

further discloses the selected message broadcast by the selected network portion is

further of values identifying the network portion from which the message is broadcast

(Jorma, abstract, which network has which services, Bridges, table 3, [0067]).

21.   For claim 6, Jorma-Bridges discloses the invention as in claim 5. Jorma-Bridges

further discloses each network portion of the plurality of network portions is identified by

an identification code and wherein the values identifying the network portion contained

in the selected message comprises the identification code (col. 2 lines 39-49, network

ID, Bridges, table 3, networks 1 to n identity).

22.   For claim 7, Jorma-Bridges discloses the invention as in claim 6. Jorma-Bridges

further discloses the radio communication system comprises a cellular communication

system operable generally pursuant to a GSM (Global System for Mobile

communications) operating protocol that defines mobile country codes and mobile

network codes and wherein the values identifying the network portion contained in the

selected message comprise a mobile country code and a mobile network code

associated with the network portion from which the message is broadcast (Jorma, col. 2

lines 39-49, network ID comprises country codes and network codes, col. 8 line 24,

GSM).

23.   For claim 8, Jorma-Bridges discloses the invention as in claim 4. Jorma-Bridges

further discloses each network portion of the at least selected ones of the network

portions broadcast the messages upon broadcast channels of a set of broadcast

channels and wherein said detector further selectably scans the broadcast channels of

the set of broadcast channels to detect the broadcasts of the messages by the selected

ones of the network portion (Bridges, [0085], broadcast channel messages to mobile

terminal which detects and updates it own database).

24.   For claim 9, Jorma-Bridges discloses the invention as in claim 7. Jorma-Bridges

further discloses said detector is further coupled to said storage element, said detector

further for storing at least selected values that define the database at said storage

element (Bridges, [0085], store and update).

25.   For claim 10, Jorma-Bridges discloses the invention as in claim 9. Jorma-Bridges

further discloses said detector further selectably removes values from the database

defined at said storage element (Bridges, [0085], overwrite, update).

26.   For claim 11, Jorma-Bridges discloses the invention as in claim 9. Jorma-Bridges

further discloses the database defined at said storage element further indicates

availability of the at least selected ones of the plurality of network portions through

which to communicate the packet data (Jorma, fig. 9B, packet data service, Bridges,

[0085], which operator is providing service).

27.   For claim 14, the claim is rejected for the same rationale as in claim 3. Jorma-

Bridges further discloses the database forming the listing defined at said storage

element is created by downloading thereto of a central database directory (fig. 4, fig. 2A,

[0046], [0074], central OTAF database containing PSL/IRDB information on list of

services and providing downloading to mobile devices), the database selectably

updatable thereafter (col. 4 lines 46-51, search and update a network list with new

networks having desired associated capabilities).

28.   For claim 33, the claim is rejected for the same rationale as in claim 3. Jorma-

Bridges further discloses the operation of receiving messages is further performed

subsequent to the operation of storing and wherein the operations of receiving and

storing are iteratively performed (Jorma, col. 4 lines 46-51, update a currently stored list,

Bridges, table 16, 17, scan periodically).

29.   For claim 16, the claim is rejected for the same rationale as in claim 15. Jorma

does not explicitly disclose the operation, prior to said operation of storing, of detecting

messages delivered to the mobile node that are of values identifying the network-portion

capabilities of associated network portions of the selected ones of the network portions.

        However, Bridges discloses the same (fig. 4, fig. 2A, [0046], [0074], central

OTAF database containing PSL/IRDB information on list of services and providing

downloading to mobile devices, [0085], [0125], broadcasting list for list update

detection)

        Therefore, it would have been obvious for one skilled in the art at the time of the

invention to combine the teachings of Jorma and Bridges to implement service list

distribution from a central database.

30.   For claim 17, Jorma-Bridges discloses the invention as in claim 16. Jorma-

Bridges further discloses said operation of detecting is further performed subsequent to

said operation of storing and wherein said operations of detecting and storing are

iteratively performed (Bridges, table 16, 17, update periodically).

31.   For claim 18, Jorma-Bridges discloses the invention as in claim 16. Jorma-

Bridges further discloses the operation, prior to said operation, prior to said operation of

detecting, of sending the messages to the mobile node (Bridges, [0085], broadcasting

update messages).

32.   For claim 19, Jorma-Bridges discloses the invention as in claim 16. Jorma-

Bridges further discloses the messages detected during said operation of detecting are

sent to the mobile node by selected network portions and wherein values contained in

the messages are selectably stored during said operation of storing (Bridges, [0085],

selectively update).

33.   For claim 20, Jorma-Bridges discloses the invention as in claim 19. Jorma-

Bridges further discloses the messages detected during said operation of detecting

identify the network portion capabilities of associated network portions of the selected

network portions (Jorma, abstract, which network has which services, Bridges, table 3,

[0067]).

34.   For claim 21, Bridges discloses an apparatus for a radio communication network

having a plurality of radio access networks, said apparatus comprising:

a central database accessible to any of the radio access networks of the plurality

of the radio access networks (fig. 2A, fig. 4, central database of radio access networks);

and

a listing formed at said central database, said listing including a network identity

and an ([0085], PSL/IRDB or preferred system identification list and intelligent roaming

database, tables 2, 3).

Bridges does not explicitly disclose:

indication of services available in a network identified by the network identity;

However, Jorma discloses the same (col. 4 lines 46-51, returns updated list of

located networks with services to user)

Therefore, it would have been obvious for one skilled in the art at the time of the

invention to combine the teachings of Jorma and Bridges to implement service selection

from a service list distributed from a central database.

35.   For claim 22, Jorma-Bridges discloses the invention as in claim 21. Jorma-

Bridges further discloses said listing further includes a roaming network indication that

identifies a network for use as a roaming network (Bridges, table 18, IRDB, roaming

information).

36.   For claim 23, Jorma-Bridges discloses the invention as in claim 22. Jorma-

Bridges further discloses the roaming network indication comprises an MCC, Mobile

Country Code, and an MNC, Mobile Network Code (Jorma, col. 2 lines 39-49, network

ID comprises country codes and network codes).

37.   For claim 24, Jorma-Bridges discloses the invention as in claim 21. Jorma-

Bridges further discloses the network identity included at said listing comprises the

network identity of a cellular network (Jorma, col. 2 lines 39-49, network PSID).

38.   For claim 25, Jorma-Bridges discloses the invention as in claim 21. Jorma-

Bridges further discloses the indication of the services included in said listing is

represented in terms of an APN (Jorma, col. 2 lines 39-49, network PSID).

39.   For claim 26, Bridges discloses a method for providing a mobile node with

network information, said method comprising the operations of:

        connecting a central database to a network (fig. 4, central database), the central

database including a listing, the listing having an identity of a network, a roaming

indication ([0085], PSL/IRDB, system identification list, roaming, table 18 roaming

indicator);

        providing the mobile node with a copy of the central database connected during

said operation of connecting (fig. 2A, download PSL/IRDB to the mobile device);

Bridges does not disclose:

        an indication of services available in the network;

        selecting a network with which to communicate responsive to contents of the

copy provisioned during said operation of provisioning.

However, Jorma discloses:

an indication of services available in the network (col. 6 lines 16-31, list of packet

data networks available at the mobile device);

selecting a network with which to communicate responsive to contents of the

copy provisioned during said operation of provisioning (abstract, user can make a

selection from the list after downloading).

Therefore, it would have been obvious for one skilled in the art at the time of the

invention to combine the teachings of Jorma and Bridges to implement service selection

from a service list distributed from a central database to the system of Bridges.

40.   For claim 31, Jorma discloses a mobile-node apparatus for providing a mobile

node with network information, said mobile-node apparatus comprising:

a receive part configured to receive a central database listing ([0085, download a

PSL/IRDB from a central database to a mobile device), the central database listing

having an identity of a network, a roaming indication ([0085], PSL/IRDB, system

identification list, roaming, table 18 roaming indicator),

Bridges does not disclose:

an indication of services available in the network; and

a selector configured to select a network with which to communicate responsive

to the central database listing.

However, Jorma discloses:

an indication of services available in the network (col. 6 lines 16-31, list of packet

data networks available at the mobile device); and

a selector configured to select a network with which to communicate responsive to the central database listing (col. 5 lines 15-20, auto select a service network).

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Jorma and Bridges to implement service selection from a service list distributed from a central database to the system of Bridges.

41.   For claim 32, Jorma a method in a mobile node capable of packet data communication with a network part, for selecting a radio access network of a plurality of radio access networks in the network part, the mobile node storing values defining a database in a storage element, the database forming a listing identifying available radio access networks of the plurality of radio access networks together with an indication associated therewith of radio access network capability to provide packet data communication with the mobile node, the method characterized by:

detecting messages received from the available radio access networks, the messages having values identifying the radio access network capabilities of the corresponding available radio access networks ([0085], detecting and receiving broadcast updates of PSL/IRDB, which includes network list with roaming information and class of services);

altering the indication of any radio access network capability of any of the available radio access networks of the listing when a message is of values identifying the radio access network capabilities to be different from identified in the listing ([0078], reprogram the changes in any entry, e.g. CoS);

Bridges does not disclose:

selecting a radio access network from the available radio access networks for

packet data communication based upon the listing formed of the database defined

during said operation of storing and altering.

However, Jorma discloses the same (col. 5 lines 15-20, selecting a network to

perform service based on a list of available network with associated supported services)

Therefore, it would have been obvious for one skilled in the art at the time of the

invention to combine the teachings of Jorma and Bridges to implement service selection

from a service list distributed from a central database to the system of Bridges.

42.   For claim 34, the claim is rejected for the same rationale as in claim 32.

Conclusion

43.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Hieu T. Hoang whose telephone number is 571-270-

1253. The examiner can normally be reached on Monday-Thursday, 8 a.m.-5 p.m.,

EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Thu Nguyen can be reached on 571-272-6967. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

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800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HH

/Kenny S Lin/

Primary Examiner, Art Unit 2452